My second visit was 31st January to 7th February, 1976. On this occasion (seven nights trapping against three in 1972) the list included 22 resident British species. Of those British autumnal species taken on the December visit only *A. nigra* and *A. lychnidis* were seen again, both getting very worn; in addition there were examples of *Conistra vaccinii* (L.), *Caradrina clavipalpis* (Scop.) and *Nycteola revayana* (Scop.). This time the surprise was a fresh specimen of *Lithophane leautieri* (Bois.), which must either hibernate there after an autumn emergence and fly again in the spring, or emerge at favourable opportunities during the winter. The three species in my second December list —*I. seriata, G. rufifasciata* and *C. rufata*—were all still common and in many cases fresh, evidently also emerging on suitable occasions throughout the winter; and the two surprises of the December list—*M. abruptaria* and *X. areola*—were seen again, the latter now commonly. The only additional British spring species to appear was *Colostygia multistrigaria* (Haw.), but this may have been due to the fact that the spring rains only began while I was there, too late for me to see anything of species emerging as a result of their arrival.

It seems therefore that many of species which live in southern Europe as well as in Britain are on the wing throughout the winter in the mild regions, and that it is the harshness of our climate which has caused them here to divide into autumn and spring fliers. I had always imagined that, as with many plants flower development can only take place when the rate of increase or decrease of daylight hours is suitable for them, so there would be a mechanism which would inhibit a spring flying moth from emerging in the autumn, and *vice versa*.

My faith in this theory was shaken, however, by the records of *A. pilosaria* in Britain in 1974 before 21st December, the shortest day; and from my Spanish records it seems clear that there is no reason why, if the winter climate in Britain continues to become milder, we should not see some of our early spring species, such as *X. areola*, appearing in the autumn and flying through the winter, hibernating perhaps only sporadically or not at all. Our autumn species, too, would persist until the spring as *A. nigra* and *A. lychnidis* do in the south of Spain. *Agrochola macilenta* (Hübn.) comes to mind as a species which might do this, as it remains on the wing in mild winters in Britain long after *A. lychnidis* is over. It was still fairly common in Herefordshire in early December 1967 (ffennell, *Ent. Rec.*, **80** (1): 28), so that perhaps it can already extend its flight period into the second half of our winter.

Notes and Observations

THE VOLTINISM OF PHYLLONORYCTER ROBORIS (ZELLER) AND P. CAVELLA (ZELLER). — In my recent paper on the oak-feeding species of *Phyllonorycter* (*Ent. Rec.*, **87**: 240-245), I made the tentative suggestion that *P. roboris* might be univoltine and Mr.

D. W. H. ffennell (*ibid.* pp. 245-247) produced potentially contradictory evidence. However, my recent experience with the species lends support to the theory of a single generation. On the 30th of August, 1975 my wife and I recorded leaf-mines on the army training area to the north-west of Ollerton in Nottinghamshire, a locality forming part of Sherwood Forest. Amongst other material, I picked five mines on oak which obviously belonged to *P. roboris*; these mines were still tenanted and there was no sign of other mines of this species from which the adult had emerged. There was a rent in the lower epidermis of one of the mines and with the aid of transmitted light and a microscope I could see through this hole that the occupant was a prepupa in its cocoon. I kept the mines under observation for six weeks but nothing emerged. So I overwintered the mines out of doors and brought them into a warm room in mid-February. On the 13th of March a specimen of *P. roboris* emerged from the mine with the rent. Now the textbooks give the larval feeding time of *P. roboris* as "7 and 9-10". If these figures are correct, my August prepupa must surely have been late generation 1 and not early generation 2; in that event it had no business to delay emergence till the following year.

On the same day in March as the imago of *P. roboris*, a parasite emerged from another of the mines. This has been identified by Dr. M. Shaw of Manchester University as *Closterocerus trifasciatus* Westwood, an interesting species which, presumably after an earlier generation on some other host, attacks *Phyllonorycter* species feeding on Fagaceae, "arriving in the *Phyllonorycter* complex right at the end of generation 1 mine availability". This means that it is generally a hyperparasite as it has come too late for healthy generation 1 hosts.

It is worth mentioning that the mines of *P. roboris* are so distinctive and easy to recognise once they have been seen, that without waiting for a confirmatory adult I confidently sent the record, which is new for Nottinghamshire, to Mr. S. N. A. Jacobs who is currently advertising in this journal for *Phyllonorycter* records.

In his letter to me, Dr. Shaw drew attention to another species of *Phyllonorycter* which, though described in our textbooks as bivoltine, is, in his experience, univoltine. This is *P. cavella* which feeds on birch. In Cheshire mines of this species are "only slightly less common than *P. ulmifoliella* in autumn", but from "around a thousand generation 1 rearings on birch, we have only recorded *cavella* 5 times . . . and these were probably just abnormally advanced *cavella* mines collected at the end of our (arbitrary) concept of generation 1". This species could be univoltine in Cheshire but bivoltine in the south-east of Britain, where it is relatively uncommon; however, the capture of two fresh specimens on the 17th of June, 1971 at Holmwood in Surrey, where I was collecting in the company of our editor, suggests that it is univoltine throughout its British range.

Stainton in his *Manual* describes these two species as bivoltine and subsequent literature has echoed his opinion. The

instances I have cited are too few to be the basis of positive deductions. If we are to get the facts right in Volume 2 of *The Moths and Butterflies of Great Britain and Ireland* we need more information with the utmost urgency: 1977 will be too late. — A. M. EMMET, Labrey Cottage, Victoria Gardens, Saffron Walden, Essex, 23.iii.76.

THE PEACOCK (INACHIS IO L.) ON THE SUMMIT OF CADER IDRIS (2,927 FT.), MERIONETH. — On 10th April, 1976, my friends Mr. and Mrs. Shand noted two Peacocks on the summit of Cader Idris. The butterflies were attempting, with remarkable persistence, to fly against the wind, presumably to reach a less exposed position on the warmer southern slopes of the mountain. I have occasionally seen Vanessas up to about 2,400 ft. on the Black Mountains but never higher. — J. P. SANKEY-BARKER, Plas Llangattock, Crickhowell, Breconshire.

RECORDS OF CHLOROCLYSTIS CHLOERATA (MABILLE). — Mr. M. Britton asks "if the imago of *chloerata* has ever been taken on any other occasion apart from at M.V. light" (*Ent. Rec.*, **88**: 67). It comes to lighted windows. I have three specimens so taken, viz. Summertown, Oxford, vi.47 and 25.vi.52, and Saffron Walden, Essex, 22.vi.70. A further record is of a specimen I reared from Waterperry Wood, Oxon, on 5.vi.52. — A. M. EMMET, Labrey Cottage, Victoria Gardens, Saffron Walden, Essex, 27.iii.76.

STEPHENSIA BRUNNICHELLA L. BRED FROM GROUND IVY. — A larva which I found mining a leaf of *Glechoma hederacea* (Ground Ivy) near Dartford, Kent, on 25th April, 1976, to my surprise on 24th May produced an imago of *S. brunnichella*. This is a previously unrecorded foodplant to my knowledge. The larva usually mines the leaves of *Calamintha clinopodium* (Wild Basil) and is not scarce on this at Mickleham, Surrey whence I bred a number of second generation moths in August 1971. — J. M. CHALMERS-HUNT.

LYCIA ZONARIA ATLANTICA (HARRISON) IN SOUTH UIST. — Mr. R. P. Demuth and I were interested to see this insect flying freely on the sandhills near Howmore towards 1 p.m. BST on 20th April, 1976, in fine, warm weather. We also found three males and a female at rest on nearby posts, but none on herbage as at Conway. I have previously seen it flying at about 4.30 p.m. in Barra in 1962. We were also shown a specimen which had come to a lighted window in the military camp on Benbecula. Our chief quarry, however, was the male Stellers Eider which we had seen in grand plumage a few days previously, along with over 100 Longtails in winter and summer plumage. — AUSTIN RICHARDSON, Orchard Cottage, Box, Stroud, Glos.